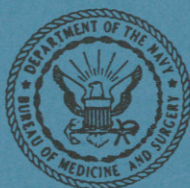


Submarine



Medicine



BUREAU OF MEDICINE AND SURGERY • DEPARTMENT OF THE NAVY

THE SUBMARINE MEDICINE PROGRAM

INTRODUCTION

Submarine Medicine is the military medical specialty which supports all underwater operations in the Navy. This includes providing medical services to the crews of all submarines, deep sea divers, and underwater swimmers. In general terms, the practice of submarine medicine can be considered a combination of general practice and of occupational medicine.

All of the underwater services in the Navy are volunteer organizations. Submarine Medicine, therefore, provides a unique opportunity to work with a highly motivated and specially trained group of volunteers. Medical officers feel that their professional careers have been enhanced and their personal lives greatly enriched through their experiences and associations in the submarine service.

Although the submarine medicine organization is a small one, the program is experiencing a rapid growth at this time. (There are presently 117 billets for submarine medical officers). Since the organization is relatively small, it is possible in most instances to give consideration to the desires and capabilities of each individual in making duty assignments.

DESCRIPTION OF DUTY ASSIGNMENTS

The Navy's highest priority program is the Fleet Ballistic Missile or POLARIS program. At present there are 29 of these ships in commission and 12 under construction or authorized by the Senate. Each of these submarines has two complete crews known as "Blue" and "Gold". While one crew is on patrol with the submarine, the other crew remains ashore for refresher training and leave. Due to the mission of these submarines and the nature of the patrols, a medical officer is assigned to each crew. Since the POLARIS submarine program creates the greatest demand for medical officers, every submarine medical officer can anticipate spending some time as a member of a POLARIS submarine crew.

Each new POLARIS submarine brings with it special medical problems. A submarine medical officer is assigned to the precommissioning crew of these submarines for a period of about 6 months. (POLARIS submarines are being built at Portsmouth, New Hampshire; New London, Connecticut; Newport News, Virginia; and Mare Island (Vallejo), California.)

A certain number of medical officers can anticipate serving from 12 to 18 months as Squadron Medical Officers. In this capacity, the medical officer has overall responsibility for the medical care of approximately 2000 officers and men. The Squadron includes a submarine

tender, containing a wide variety of industrial repair facilities, and a 35-bed hospital. The Squadron also includes a diving ship; therefore the medical officer is responsible for medical supervision of the divers. Submarine Squadrons are located at New London, Connecticut; Norfolk, Virginia; Charleston, South Carolina; Key West, Florida; San Diego, California; Pearl Harbor, Hawaii; Guam; Rota, Spain; and Holy Loch, Scotland.

Service in submarine medicine also offers special opportunities for those interested in research and teaching assignments. The Submarine Medical Center, Submarine Base, New London, Connecticut, is the home of Submarine Medicine. Research and teaching in all phases of submarine medicine are carried on at this Center. Of greatest importance are training of submarine medical officers, research programs in respiratory physiology and in assessment of personnel for submarine duty. Medical officers assigned to the Center may also have additional duty at the Submarine Escape Training Tank.

The foremost center for training in deep sea diving and for research in underwater physiology is located in Washington, D. C. Two activities - the Naval School, Deep Sea Divers, and the Naval Experimental Diving Unit, occupy a single building at the Naval Weapons Plant. Medical officers assigned to these activities work together in teaching the medical aspects of diving and in conducting research in underwater physiology. Submarine research billets are also located at the Naval Medical Research Institute and the Armed Forces Radiobiology Research Institute at Bethesda, Maryland.

Another assignment in submarine medicine is duty on the staff of the Underwater Swimmers School, Key West, Florida. This school is the "SCUBA College" of the Navy. Here the medical officer participates in the training program, and also provides medical care for the staff, students, and their dependents. Submarine medical officers also serve with Underwater Demolition Teams. This duty is similar to that at the Underwater Swimmers School. At present, teams are located on each coast.

TRAINING PROGRAM

The training course in Submarine Medicine is conducted at the Submarine Medical Center at New London, Connecticut. The six months' course will convene twice yearly - in August and February. The curriculum includes: Basic Submarine Training, Underwater Physiology, Submarine Medicine, Radiobiology and underway periods for submarine and diving familiarization and orientation. Medical officers receive practical experience in all aspects of deep sea diving during this period.

SUBMARINE MEDICINE QUALIFICATION

Graduates of the training course are eligible to wear the Submarine Medicine insignia after they have been designated as "Qualified Submarine

Medical Officers". To achieve qualification, they must practice this specialty for three months, prepare an acceptable thesis, and pass a comprehensive examination.

CAREER FUTURES OF SUBMARINE MEDICAL OFFICERS

Graduates of the training course applying for postgraduate or residency training in internal medicine, occupational medicine, public health, radiobiology and research, receive credit for submarine training as part of their requirement for certification. Advanced courses in diving medicine are available at the University of Pennsylvania and the University of Buffalo. Clinical medical specialty training in all fields is available to submarine medical officers on an equal basis with other medical officers. In many instances their submarine duty enhances their possibility of selection for specialty training.

EXTRA COMPENSATION

Medical officers assigned to duty on board a submarine or attached to a submarine squadron are entitled to receive submarine pay, in addition to all other compensation. The amount of submarine pay received varies with rank and time in service. The details of this are given in the following table:

<u>RANK</u>	<u>CUMULATIVE YEARS OF SERVICE</u>			
	<u>Over 4</u>	<u>Over 6</u>	<u>Over 8</u>	<u>Over 10</u>
LT	\$165	\$180	\$185	\$190
LCDR	185	185	195	210

Therefore, a submarine medical officer in the grade of Lieutenant with dependents, and with more than 4 years' service for pay purposes, receives a monthly income of \$976.03. Medical officers attached to the Submarine Escape Training Tanks, the Naval School, Deep Sea Divers, Experimental Diving Unit, Underwater Demolition Teams, and Underwater Swimmers School, receive extra compensation at the rate of \$110 per month. Such an officer, with dependents and more than 4 years' service for pay purposes, receives a monthly income of \$921.93.

OBLIGATED SERVICE

The obligated service requirement for attending this course is an agreement to remain on active duty for 24 months following completion of training or six months beyond any current obligation, whichever is longer.

Curriculum for Submarine Medical Officers

Submarine Medicine

Conducted at Submarine Medical Center, Submarine Base, New London, Connecticut. Underway periods aboard submarines are not included in total hours.

<u>DIVISIONS</u>	<u>TIME</u>
1. MEDICAL DEPARTMENT ADMINISTRATION	18 hrs.
2. DIVING MEDICINE INDOCTRINATION	175 hrs.
3. NUCLEAR MEDICINE TECHNIQUE	246 hrs.
4. SUBMARINE SCHOOL	
A. Naval Orientation	24 hrs.
B. Basic Submarine School	97 hrs.
5. SUBMARINE ATMOSPHERE CONTROL AND TOXICOLOGY	43 hrs.
6. PREVENTIVE MEDICINE AND SUBMARINE SANITATION	15 hrs.
7. MEDICAL SPECIALTIES	100 hrs.
8. NBC WARFARE	11 hrs.
Total Time	729 hrs.

SUBMISSION OF APPLICATIONS

Applications for assignment to the course of instruction in Submarine Medicine should be made by means of an official letter addressed to the Chief, Bureau of Medicine and Surgery, stating the convening date desired, and contain the obligated service agreement which in substance states that you agree to serve on active duty for 24 months following completion of the training course or 6 months beyond your current obligated service, whichever is longer. The training in submarine and diving medicine and the training in Radiobiology and Nuclear Physics are creditable toward Board certification in Internal Medicine and also by the American Board of Preventive Medicine in the sub-specialty of Occupational Medicine.

* * * * *

If you desire further information regarding the Submarine Medicine Program, address inquiries to the: Director, Submarine and Radiation Medicine Division, Bureau of Medicine and Surgery, Navy Department, 2300 "E" Street, N. W. , Washington, D.C. 20390.

